

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously presented) A method of filtering a red-eye phenomenon from an acquired digital image comprising a multiplicity of pixels indicative of color, the pixels forming various shapes within the image, the method comprising:

(a) analyzing meta-data information including image acquisition device-specific information including color transformation due to spectral response curve of sensor, or overall CCD size, or combinations thereof; and

(b) determining, based at least in part on said meta-data analysis, whether one or more regions within said digital image are suspected as including red eye artifact.

2. (original) The method of claim 1, further comprising analyzing pixel information within one or more regions suspected as including red eye artifact based on said meta-data analysis, and determining whether any of said one or more suspected regions continue to be suspected as including red eye artifact based on said pixel analysis, said pixel analysis being performed after said meta-data analysis.

3. (previously presented) The method of claim 1, further comprising analyzing pixel information within said digital image, and determining whether said one or more regions are suspected as including red eye artifact based on said pixel analysis, and wherein said pixel analysis is performed after said meta-data analysis.

4. (original) The method of claim 1, further comprising analyzing pixel information within said digital image, and determining whether one or more same or different regions are suspected as including red eye artifact based on said pixel analysis, said pixel analysis being performed independent of said meta-data analysis.

5. (previously presented) The method of claim 1, wherein the meta-data further comprises anthropometrical data.
6. (previously presented) The method of claim 1, wherein said filtering is executed at least partially within a portable image acquisition device, having no photographic film.
7. (previously presented) The method of claim 1, wherein said filtering is executed at least in part as a post-processing operation on an external computation device.
8. (previously presented) The method of claim 7, wherein some or all of said meta-data analysis is performed on said image acquisition device.
9. (previously presented) The method of claim 8, further comprising marking certain regions determined to be suspected as including red eye artifact based on said analyzing, wherein said marking of certain regions facilitates correction during said post-processing operation on said external computation device.
10. (previously presented) The method of claim 7, wherein some of said meta-data analysis or said suspected region determining or a combination thereof is performed on said image acquisition device, and some of said meta-data analysis or said suspected region determining or a combination thereof is performed during said post-processing operation on said external computation device.
11. (previously presented) The method of claim 1, wherein a lens is used to capture the image, and wherein said meta-data information comprises focal length of the lens at the time of acquisition.
12. (previously presented) The method of claim 11, wherein said meta-data information further comprises focusing distance of the lens at time of acquisition.

13. (previously presented) The method of claim 11, wherein said meta-data information comprises effective sensor size.

14. (previously presented) The method of claim 13, wherein said actual red eye artifact is determined based on calculated expected size of said red eye artifact based on said meta-data information including said acquisition device-specific information.

15. (previously presented) The method of claim 14, wherein said calculated expected size of said red eye artifact is defined as a range with a density probability function, and wherein the range is calculated based on depth of field.

16. (previously presented) The method of claim 13, wherein said calculated expected size of said red eye artifact is defined as a range with a density probability function, and wherein the range is estimated.

17. (previously presented) The method of claim 13, wherein said calculated expected size of said red eye artifact is defined as a range with a density probability function, and wherein said meta-data comprises anthropometrical data, and wherein said range is determined by a statistical distribution of said anthropometrical data.

18. (previously presented) The method of claim 1, wherein said determining operation includes a probability determination process based upon a plurality of criteria.

19. (original) The method of claim 1, further comprising:

(i) adjusting a pixel color within any of said regions wherein red eye artifact is determined; and

(ii) outputting image data to a printer.

20. (previously presented) The method of claim 19, wherein the pixel color is adjusted within the printer.
21. (previously presented) The method of claim 1, wherein said meta-data information comprises information describing conditions under which the image was acquired.
22. (previously presented) The method of claim 21, wherein said meta-data information comprises an indication of whether a flash was used when the image was acquired.
23. (previously presented) The method of claim 21, wherein said meta-data information comprises aperture at the time of the acquisition.
24. (original) The method of claim 21, further comprising analyzing pixel information within one or more regions suspected as including red eye artifact based on said meta-data analysis, and determining whether any of said one or more suspected regions continue to be suspected as including red eye artifact based on said pixel analysis, said pixel analysis being performed after said meta-data analysis.
25. (previously presented) The method of claim 21, wherein the meta-data further comprises anthropometrical data.
26. (previously presented) The method of claim 21, wherein a lens is used to capture the image, and wherein said meta-data information comprises focal length of the lens at the time of acquisition.
27. (previously presented) The method of claim 26, wherein said meta-data information further comprises focusing distance of the lens at time of acquisition.

28. (previously presented) A method of filtering a red-eye phenomenon from an acquired digital image comprising a multiplicity of pixels indicative of color, the pixels forming various shapes within the image, the method comprising:

(a) analyzing meta-data information including image acquisition device-specific information including aperture, f-stop, color transformation due to spectral response curve of sensor, or overall CCD size, or combinations thereof; and

(b) determining, based at least in part on said meta-data analysis, whether one or more regions within said digital image are suspected as including red eye artifact, wherein said meta-data information comprises effective sensor width and length.

29. (original) The method of claim 21, further comprising:

(i) adjusting a pixel color within any of said regions wherein red eye artifact is determined; and

(ii) outputting image data to a printer.

30. (previously presented) The method of claim 29, wherein the image is adjusted within the printer.

31. (previously presented) A method of filtering a red-eye phenomenon from an acquired digital image comprising a multiplicity of pixels indicative of color, the pixels forming various shapes within the image, the method comprising:

(a) analyzing meta-data information including image acquisition device-specific information including a spectral response curve of a sensor stored as a look-up table of an acquisition device with which the image was acquired; and

(b) determining, based at least in part on said meta-data analysis, whether one or more regions within said digital image are suspected as including red eye artifact.

32. (previously presented) The method of claim 31, wherein said meta-data information comprises a color transformation from raw sensor pixel values to saved image pixel values.

33. (previously presented) The method of claim 31, wherein said determining operation includes a probability determination process based upon a plurality of criteria.

34. (previously presented) The method of claim 31, wherein said meta-data information comprises acquisition device-specific information.

35. (previously presented) The method of claim 34, wherein said meta-data information comprises one or more conditions under which the image was acquired.

36. (previously presented) The method of claim 35, wherein said meta-data comprises a color transformation from raw sensor pixel values to saved image pixel values.

37. (previously presented) The method of claim 36, wherein color values of said pixels indicative of red eye color are calculated based on a spectral response of said red eye phenomenon.

38. (previously presented) The method of claim 37, wherein the spectral response of said red eye phenomenon is according to illumination by a spectral distribution of a camera flash unit.

39. (previously presented) The method of claim 38, wherein the spectral distribution of said camera flash unit is as recorded by said sensor of said acquisition device with which said image was acquired.

40. (previously presented) The method of claim 39, wherein said determining operation includes comparing pixels indicative of red eye color and a multiplicity of pixels forming various shapes.

41. (previously presented) The method of claim 40, wherein said pixels indicative of red eye color are calculated based on an inverse transformation of said color transformation from raw sensor pixel values to saved image pixel values.

42-73 (cancelled).

74. (currently amended) A method of filtering a red-eye phenomenon from an acquired digital image comprising a multiplicity of pixels indicative of color, the pixels forming various shapes within the image, the method comprising: using a portable processor-based image acquisition device including a lens, an image sensor, a processor, and memory having program code embodied therein for programming the processor to perform the following:

(a) analyzing information describing conditions under which the image was acquired; and

(b) determining, based at least in part on said analyzing, whether one or more regions within said digital image are suspected as including red eye artifact, including analyzing a shape of a first pixel surrounding a region that is red in color and foregoing shape analysis of a second pixel determined not to be surrounding a region that is red in color.

75. (previously presented) The method of claim 74, further comprising analyzing pixel information within one or more regions suspected as including red eye artifact based on said analyzing of information describing conditions under which the image was acquired, and determining whether any of said one or more suspected regions continue to be suspected as including red eye artifact based on said pixel analysis, said pixel analysis

being performed after said analyzing of information describing conditions under which the image was acquired.

76. (previously presented) The method of claim 74, further comprising analyzing pixel information within said digital image, and determining whether said one or more regions are suspected as including red eye artifact based on said pixel analysis, and wherein said pixel analysis is performed after said analyzing of information describing conditions under which the image was acquired.

77. (previously presented) The method of claim 74, further comprising obtaining anthropometrical information of human faces and said determining, based at least in part on said analyzing of information describing conditions under which the image was acquired, whether said regions are actual red eye artifact, being based further on said anthropometrical information.

78. (previously presented) The method of claim 74, wherein said filtering method is executed within a portable image acquisition device, having no photographic film.

79. (previously presented) The method of claim 74, wherein said filtering method is executed as a post-processing step on an external computation device.

80. (previously presented) The method of claim 74, wherein said information describes conditions under which the image was acquired and comprises an indication of whether a flash was used when the image was acquired.

81. (previously presented) The method of claim 74, wherein said determining whether said regions are actual red eye artifact is performed within a digital camera as a probability determination process based upon a plurality of criteria.

82. (original) The method of claim 74, further comprising:

- (i) adjusting a pixel color within any of said regions wherein red eye artifact is determined; and
- (ii) outputting image data to a printer.

83. (previously presented) The method of claim 82, wherein said determining whether said regions are actual red eye artifact is performed within a digital camera as a probability determination process based upon a plurality of criteria, and wherein the pixel color is adjusted within the printer.

84-108 (cancelled).